5

10

FIBRE CHANNEL ADDRESS ADAPTOR HAVING DATA BUFFER EXTENSION AND ADDRESS MAPPING IN A FIBRE CHANNEL SWITCH

ABSTRACT OF THE DISCLOSURE

A method and apparatus that recognizes a portion of an address that would be unrecognizable to an intended associated switch or device and manipulates the portion of the address to make it recognizable. The apparatus and method manipulates a discontinuous address to provide the appearance to the associated device, switch or peripheral, that the address is continuous. This provides additional address capacity such that a new address is created within the switch itself for routing data within the switch. All or a portion of the switches in network are preassigned a chassis address, and each chassis also has a specific switch address that is different from the preassigned chassis address. An address adaptor provides translation of addresses and mapping within a switch so that in the event of a port failure, affected frames can be redirected from the failed port by employing the described translation and mapping operations.